

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/693,084	10/19/2000	Kenneth B. Trauner	P1-15	7795
75	90 .06/23/2005		EXAMINER	
John P Woold	ridge		CROSS, L	ATOYA I
252 KAIPII PL. KIHEI, HI 96753			ART UNIT PAPER NUMBER 1743	
miles, m. 50755				
		DATE MAILED: 06/23/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		09/693,084	TRAUNER ET AL.			
		Examiner	Art Unit			
		LaToya I. Cross	1743			
Pariod f	The MAILING DATE of this communication appears on the cover sheet with the correspondence address					
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	,					
1)⊠ 2a)⊟ 3)⊡	This action is FINAL . 2b)⊠ This	s action is non-final. ince except for formal matters, pro				
Disposit	tion of Claims		·			
5)□ 6)⊠ 7)□	4) ☐ Claim(s) 1,3-13,15,17-34,36,38,40,41,48 and 49 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,3-13,15,17-34,36,38,40,41,48 and 49 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.					
Applicat	ion Papers					
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority	under 35 U.S.C. § 119					
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
2) Notion Notion Notion Notion Notion	nt(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				



Art Unit: 1743

DETAILED ACTION

This Office Action is in response to Applicants remarks filed on January 14, 2005. Claims 1, 3-13, 15, 17-34, 36, 38, 40, 41, 48, 49 are pending.

Withdrawal of Rejections from Previous Office Action

- The obviousness rejections based on Johnson et al are withdrawn in view of Applicants' argument that none of the references taught a sensor that was actually located within a beverage container, specifically, a wine bottle.

Claim Rejections - 35 USC § 103

- 1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 2. Claims 1, 3-5, 7-13, 15, 17-31, 33, 34, 38, 48, 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,304,766 to Colvin, Jr. in view of US Patent 5,614,718 to Brace.

Colvin, Jr. disclose a sensing device for in situ sensing. The reference discloses several different type of sensor. In one embodiment, a sensor capable of operating using light-absorbing indicator molecules (sensor) is disclosed. The light-absorbing indicator molecule is calibrated by determining the illumination intensity levels for various known concentrations of various analytes of interest (col. 11, lines 20-31). The light absorbing molecules are responsive to

Art Unit: 1743

glucose (sugars), as disclosed at col. 12, lines 65-67. The level of absorption varies as a function of the analyte concentration. By measuring the amount of internally reflected radiation, the analyte concentration can be determined (col. 3, lines 2-5). A photosensitive element (measuring package) is embedded within the sensor body and measures the light emitted by the light source. At col. 14, lines 50-55, Colvin, Jr. discloses a different embodiment where refraction-based sensors could be placed in a bottle of champagne or wine as it is processing and used to measure the sugar content as champagne or wine develops.

Colvin, Jr. differs in that while the reference discloses absorbance-based sensors, the reference does not specifically disclose that absorbance based sensor may be placed in bottles of wine.

Brace teaches evaluating the quality of beverages, where the chemical constituents of the beverage are determined using the spectrum data. Specifically, the beverage container is subjected to spectral analysis using NIR transmission to acquire information in the form of spectral signatures, which are analyzed for qualitative features that allow accurate classification of the material in the container. At col. 4, lines 25-31, Brace teaches that the information provided through the spectroscopic analysis is indicative of absorption bands in the near infrared and allows quantifying the concentration or pressure of specific gases within the analysis container, which includes measurement of the head space gas concentrations to determine carbonation loss rate.

It would have been obvious to one of ordinary skill in the art that since absorbance-based sensor are conventionally used to determine wine quality, the absorbance based, in the form disclosed by Colvin, Jr. could also be to measure the

Art Unit: 1743

quality of a beverage, where the sensor is placed inside the wine bottle. Furthermore, since Colvin, Jr. discloses that the sensors are prefereably sensitive to sugars, it would have also been obvious to place the sensor inside the wine bottle so that sugar content could be measured.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 USC 103 in view of the teachings of Colvin, Jr. and Brace.

3. Claims 6, 24, 32, 36, 40, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colvin, Jr. and Brace as applied to claims 1, 3-5, 8-13, 15, 17-31 above, and further in view of US Patent 5,969,606 to Reber et al.

The disclosures of Colvin, Jr. and Brace are described above. Neither reference teaches a microprocessor or an external computer.

Reber et al teach a sensor that senses a condition of a food item within a container. The food item may be a liquid food item such as fruit juices, milk, etc. The sensor is one that senses humidity, temperature, food quality, or acidity (pH). A signal is communicated from the sensor to an electronic tag and in turn to an indicator. The indicator provides either an audible or visual indication of the condition of the food item. See col. 3, line 32 – col. 4, line 4. A processor, which may be in the form of a

Art Unit: 1743

microprocessor, is used to communication information between the sensor and the electronic tag (col. 6, lines 1-9). A receiver and transmitter are coupled to the processor to transmit information regarding the condition of the food for external readings (col. 6, lines 16-20). It would have been obvious to one of ordinary skill in the art to use a microprocessor to transform information into a form comprehendible by the user and further download the information into an external computer for storing the result for later use.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 USC 103, in view of the teachings of Colvin, Jr. and Brace and further in view of Reber et al.

Response to Arguments

4. Applicant's arguments with respect to the pending claims have been considered but are most in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is 571-272-1256. The examiner can normally be reached on Monday-Friday 8:30 a.m. - 5:00 p.m..

Art Unit: 1743

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lic

Jill Warden
Supervisory Patent Examiner
Technology Center 1700